

FIG. 1

FIG. 2

Protocol			
Cycle 1: (1X)	Step 1:	95.0 C	for 01:00
Cycle 2: (40X)	Step 1:	95.0 C	for 00:20
	Step 2:	53.0 C	for 00:20
	Step 3:	68.0 C	for 00:20
Cycle 3: (1X)			

HotMaster Taq Reactions w/ STND dNTPs		
Reaction Component	Initial Concentration or Volume	Final Concentration/ Volume
QuantMaster Probe Buffer	10X	1X
dNTP Mix		
dATP 10mM	200uM	
dCTP 10mM	200uM	
dGTP 10mM	200uM	
dTTP 10mM	200uM	
FactorVIII Forward Primer	10uM	
FactorVIII Reverse Primer	10uM	
HotMaster Taq Polymerase	5U/ul	
HBGW	36.8 - 38.8 uL	
* Human gDNA (Promega)	25ng/uL	
* Not Included in NTCs		

HotMaster Taq Reactions w/ 20% dUTP Mix		
Reaction Component	Initial Concentration or Volume	Final Concentration/ Volume
QuantMaster Probe Buffer	10X	1X
dNTP Mix		
dATP 10mM	200uM	
dCTP 10mM	200uM	
dGTP 10mM	200uM	
dTTP 10mM	180uM	
dUTP 2mM	40uM	
FactorVIII Forward Primer	10uM	
FactorVIII Reverse Primer	10uM	
HotMaster Taq Polymerase	5U/ul	
HBGW	36.8 - 38.8 uL	
* Human gDNA (Promega)	25ng/uL	
* Not Included in NTCs		

NTC w/ 20% dUTP Mix

NTC w/ STND dNTPs

HotMaster Taq w/ 20% dUTP Mix

HotMaster Taq w/ STND dNTPs

100bp Ladder

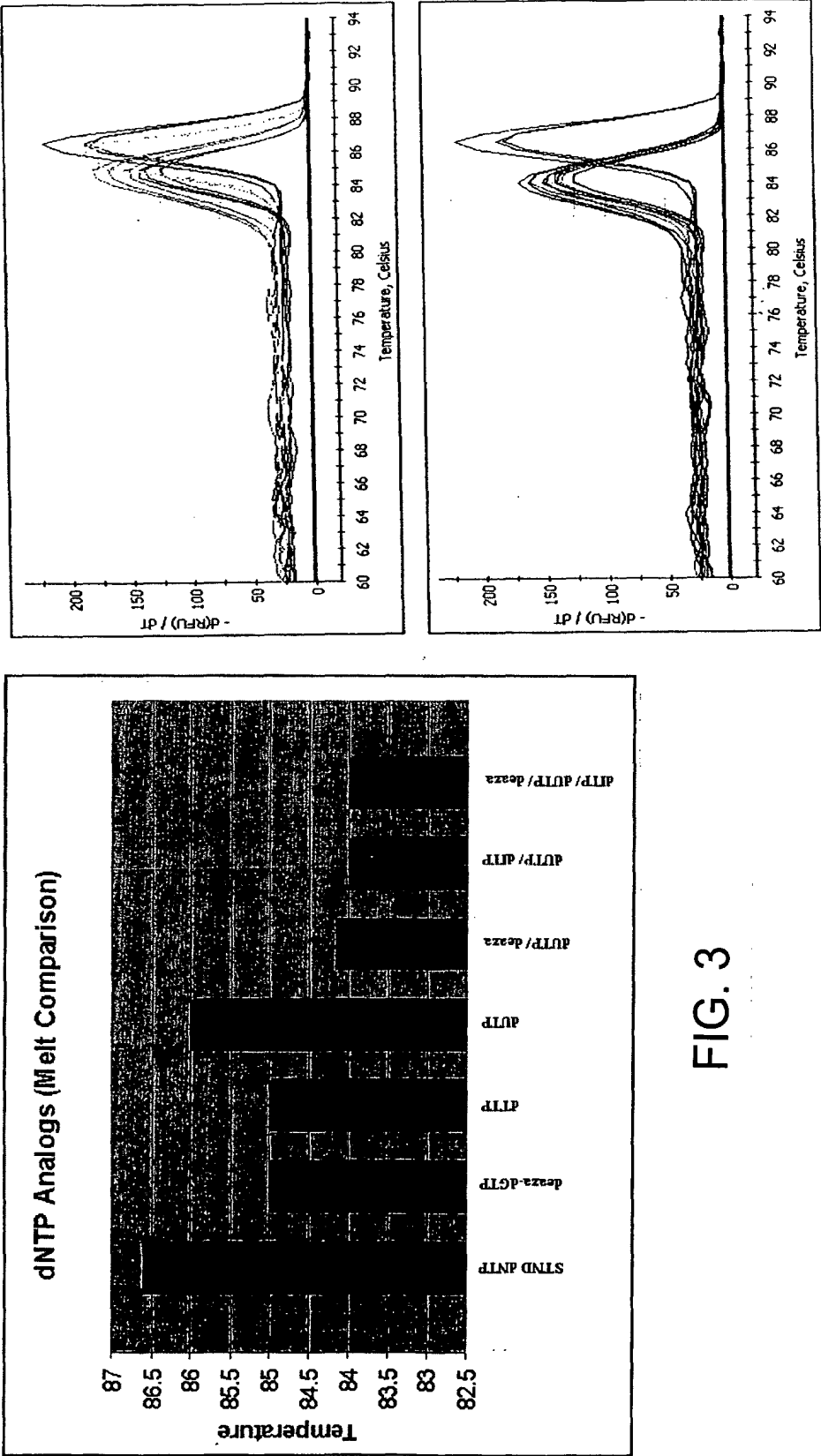
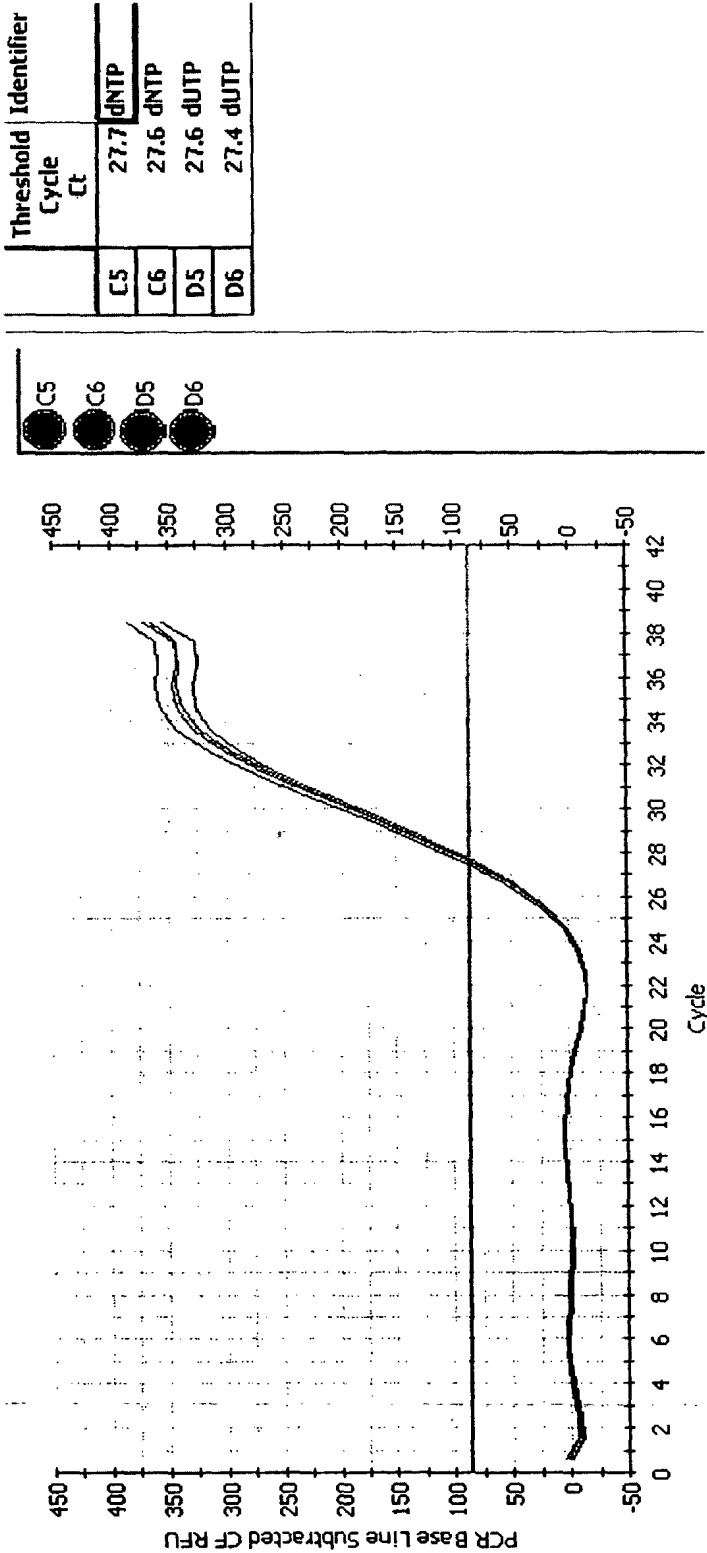


FIG. 3

dTTP (10mM) vs dUTP (2.5mM, 7.5mM dTTP)



In real-time RT-PCR, the use of dTTP or a combination of dTTP and dUTP does not seem to affect the Ct or RFU significantly.

FIG. 4A

Standard dNTP mix with dTTP (10mM) vs dUTP mix
(2.5mM dUTP, 7.5mM dTTP)

These results show that the addition of dUTP to
the dNTP mix does not significantly affect the
product yield.

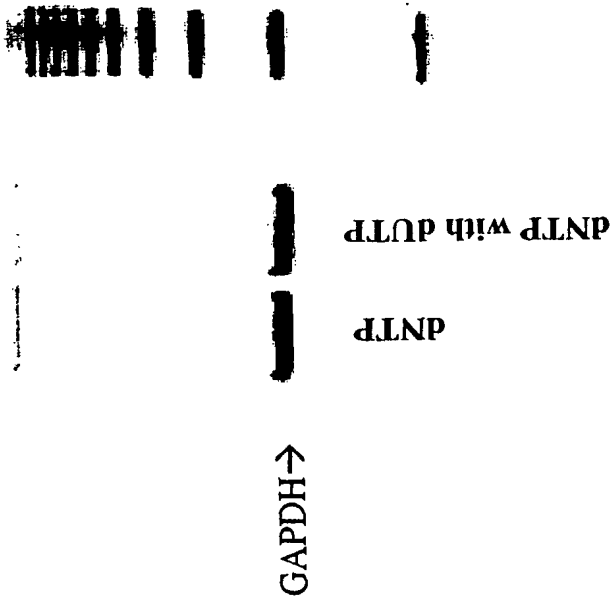


FIG. 4B

Beta-Actin mRNA Sequence

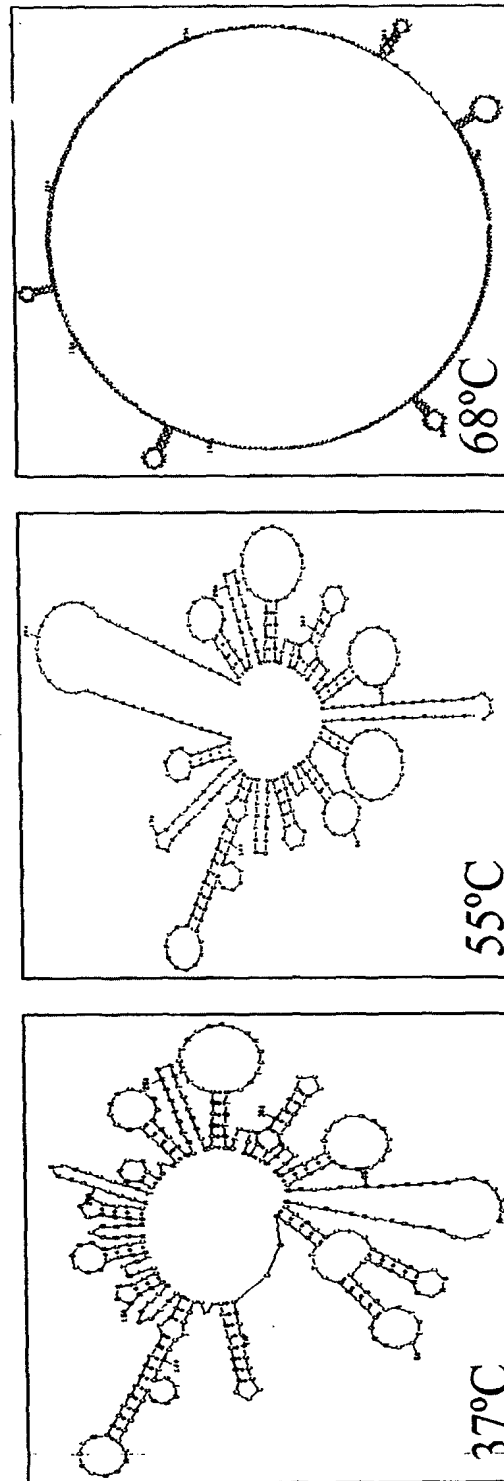
[illegible]

FIG. 5A

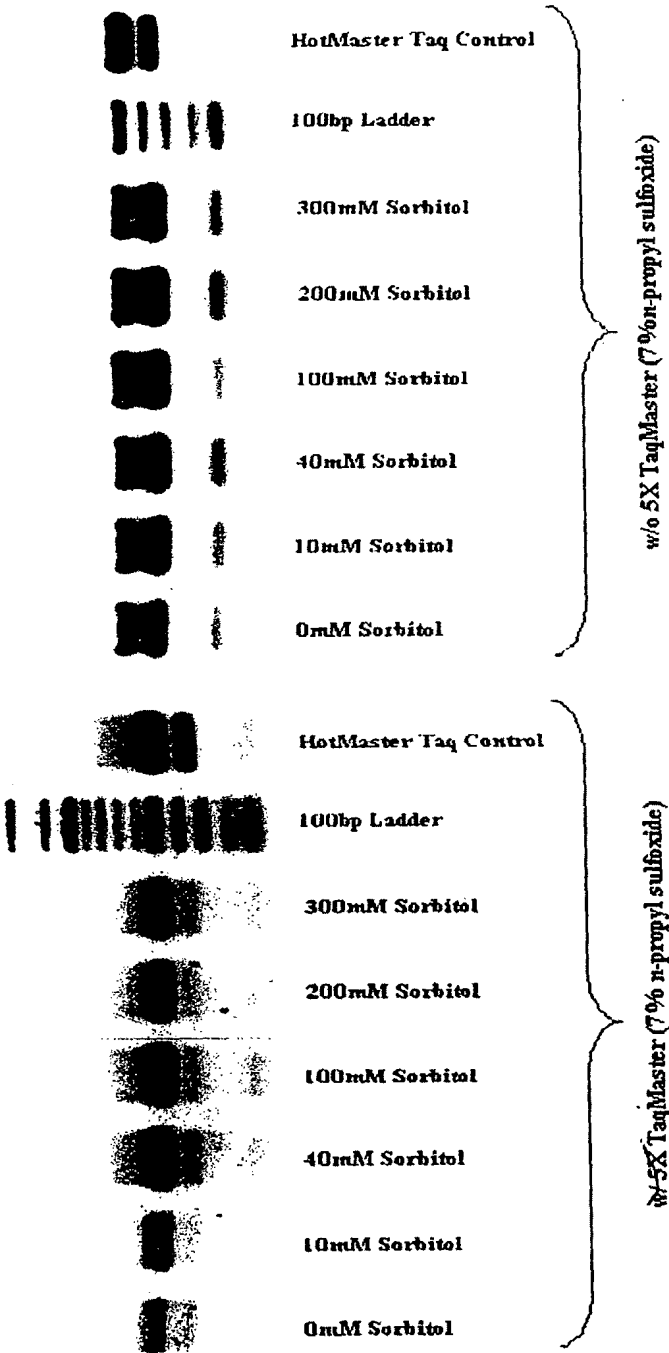


FIG. 6

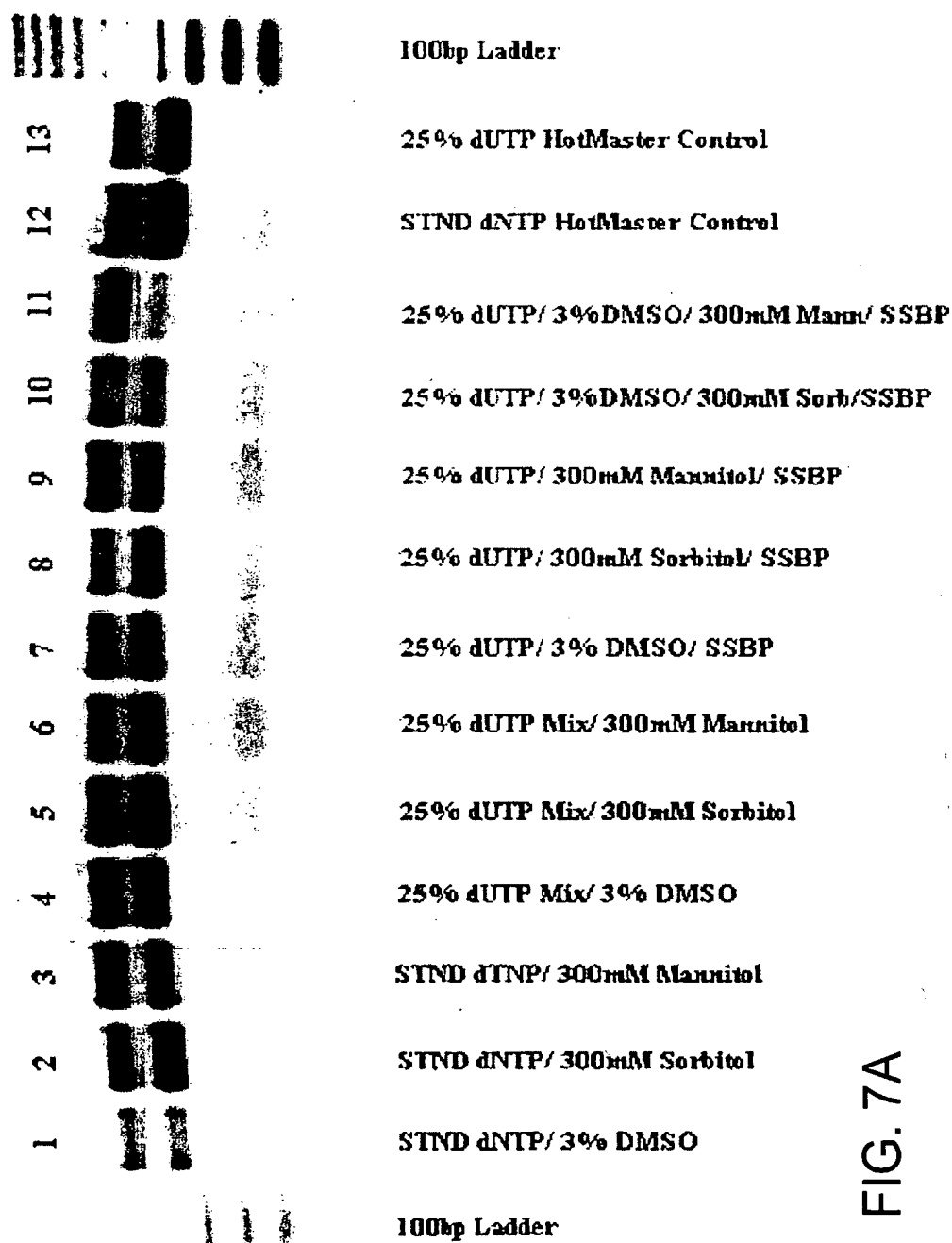
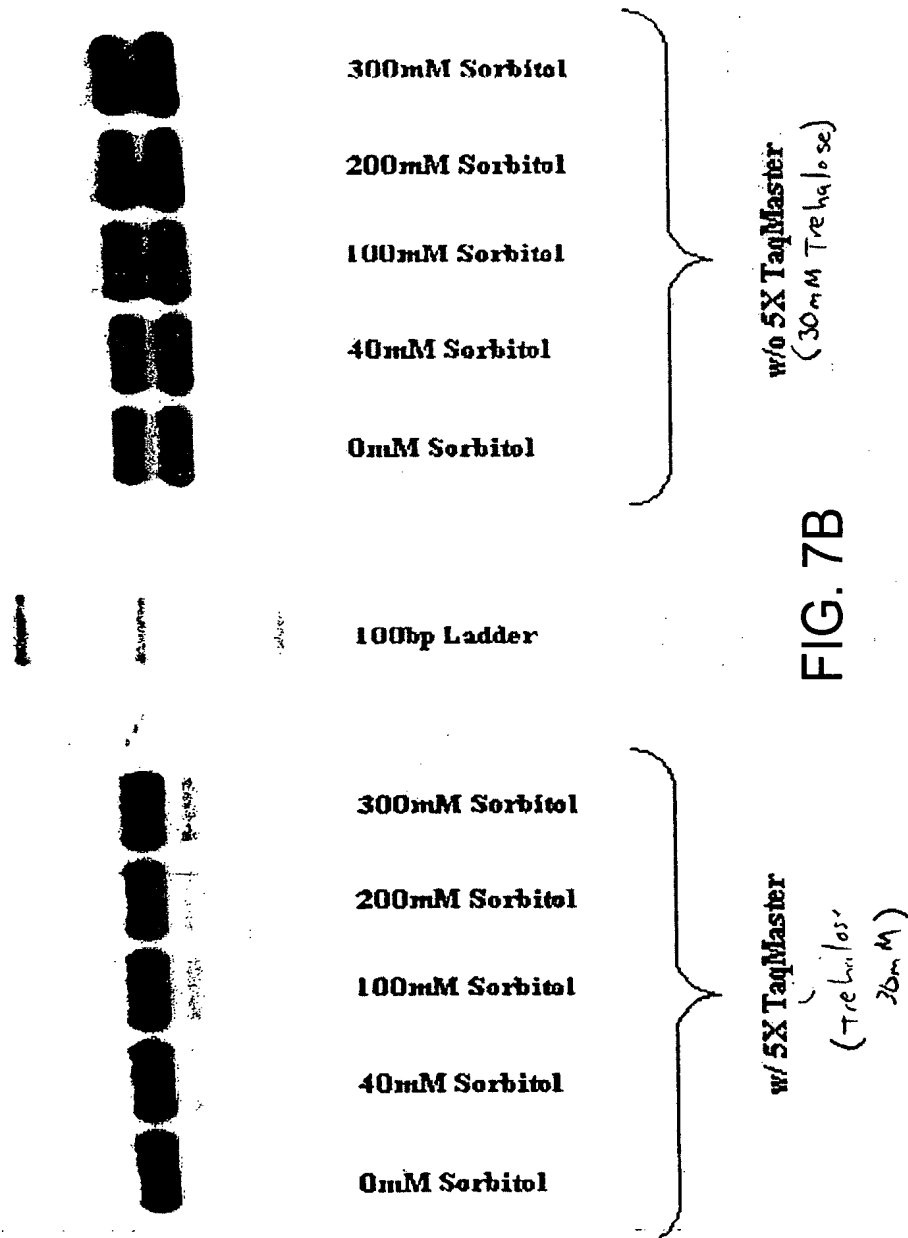


FIG. 7A



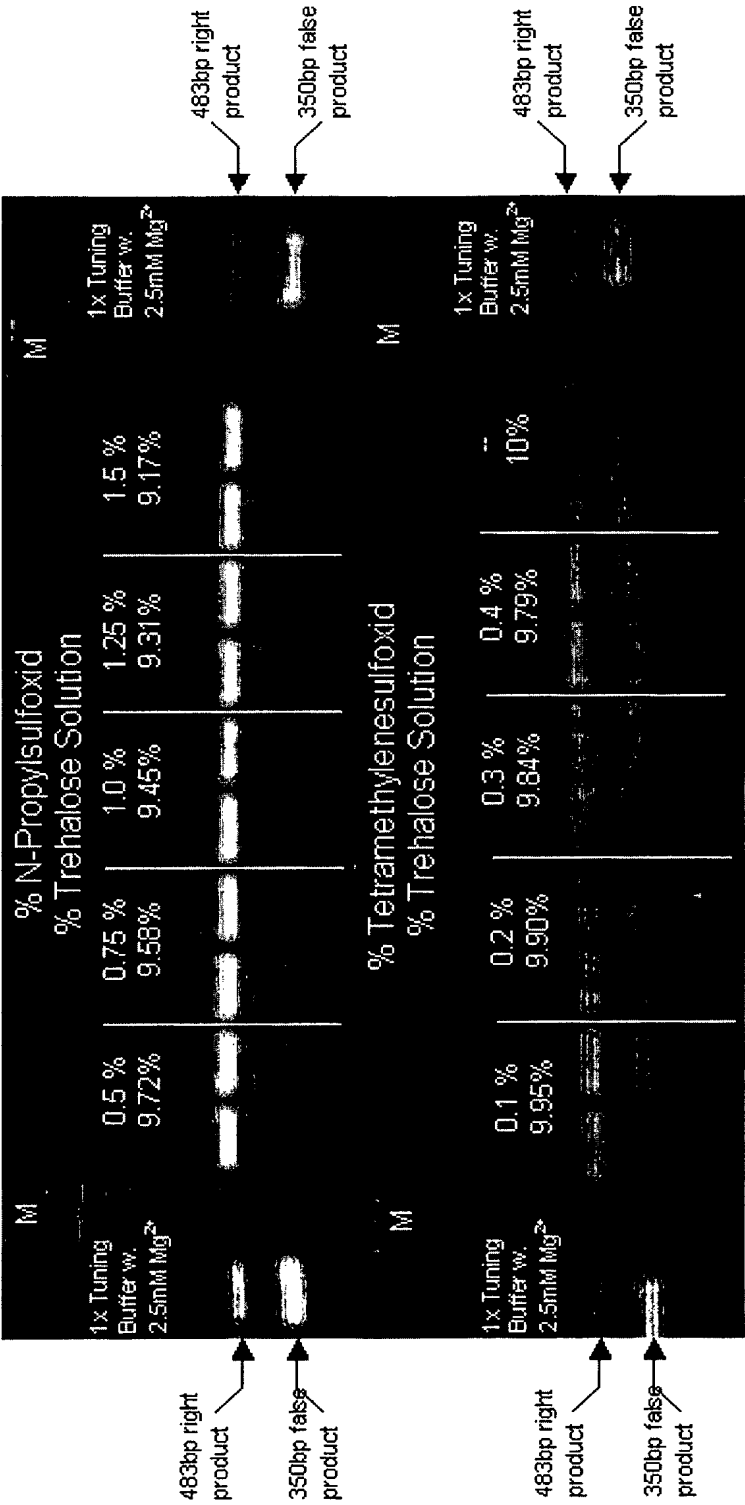


FIG. 8

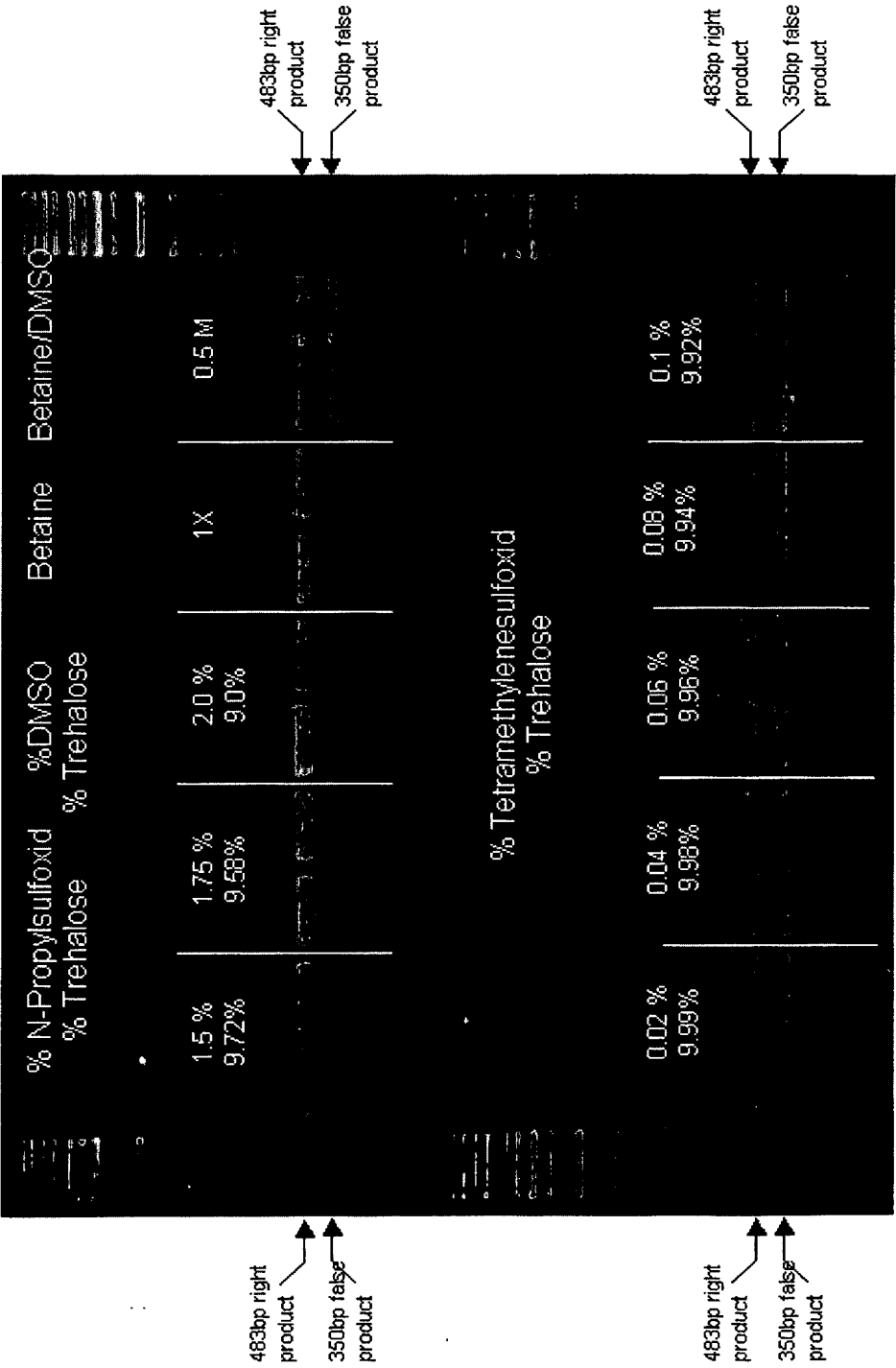


FIG. 9